

Breakfast Meeting - Left Main Coronary Intervention

Technical Tips  
Lesion-specific two-stent  
approach

Speaker - 12'

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**The major findings of this study of 403 LM lesions treated with DES implantation and IVUS imaging of LAD and LCX were**

(1) Compared with the high rate of ISR in LM bifurcation lesions with 2 stents (25.4%), bifurcation lesions with a single stent showed a lower restenosis rate (6.3%) that was similar to nonbifurcation lesions (4.5%);

(2) A smaller IVUS-MSA predicted angiographic ISR at 9 months after DES implantation to treat LM disease;

(3) The best IVUS-MSA criteria that predicted angiographic ISR on a segmental basis were 5.0 mm<sup>2</sup> for the LCX ostium, 6.3 mm<sup>2</sup> for the LAD ostium, 7.2 mm<sup>2</sup> for the POC, and 8.2 mm<sup>2</sup> for the proximal LM above the POC;

(4) Post stenting underexpansion was an independent predictor for 2-year MACE, especially repeat revascularization;

(5) Stent malapposition did not predict ISR or MACE.

# JAHA 2012

## Unprotected Left Main Percutaneous Coronary Intervention: Integrated Use of Fractional Flow Reserve and Intravascular Ultrasound

Seung-Jung Park, MD, PhD; Jung-Min Ahn, MD; Soo-Jin Kang, MD, PhD

Even in the 2-stent group, lesions with complete expansion at all sites showed only 6% of the ISR rate, which was similar to that of the single-stent group (6.3%) or in non-bifurcation LMCA lesions (4.5%).

# Left Main Trifurcation



Baseline

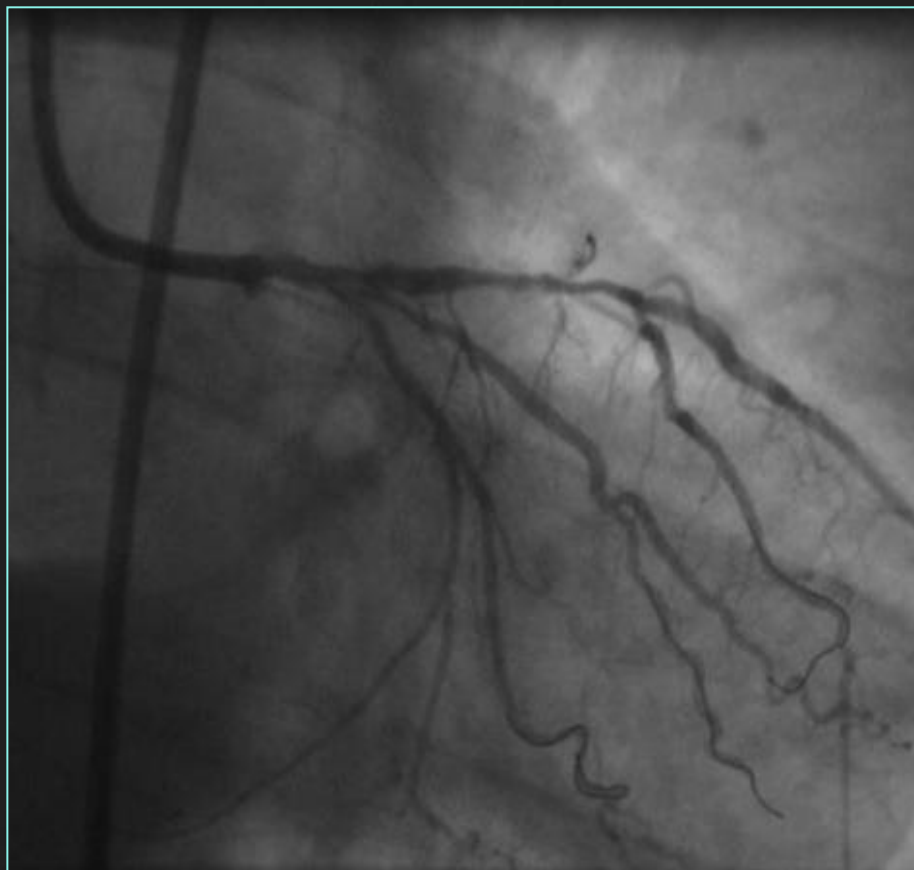
# Left Main Trifurcation



February 10-12, 2011  
Rome, Italy

Baseline

# Left Main Trifurcation



Following Left Main  
Predilatation



Dilatation Intermediate  
Branch

# Left Main Trifurcation



Following Dilatation Intermediate Branch

# Left Main Trifurcation



Stenting LM-LAD



Following Stenting LM-LAD



# Left Main Trifurcation



Kissing Balloon Inflation

# Left Main Trifurcation



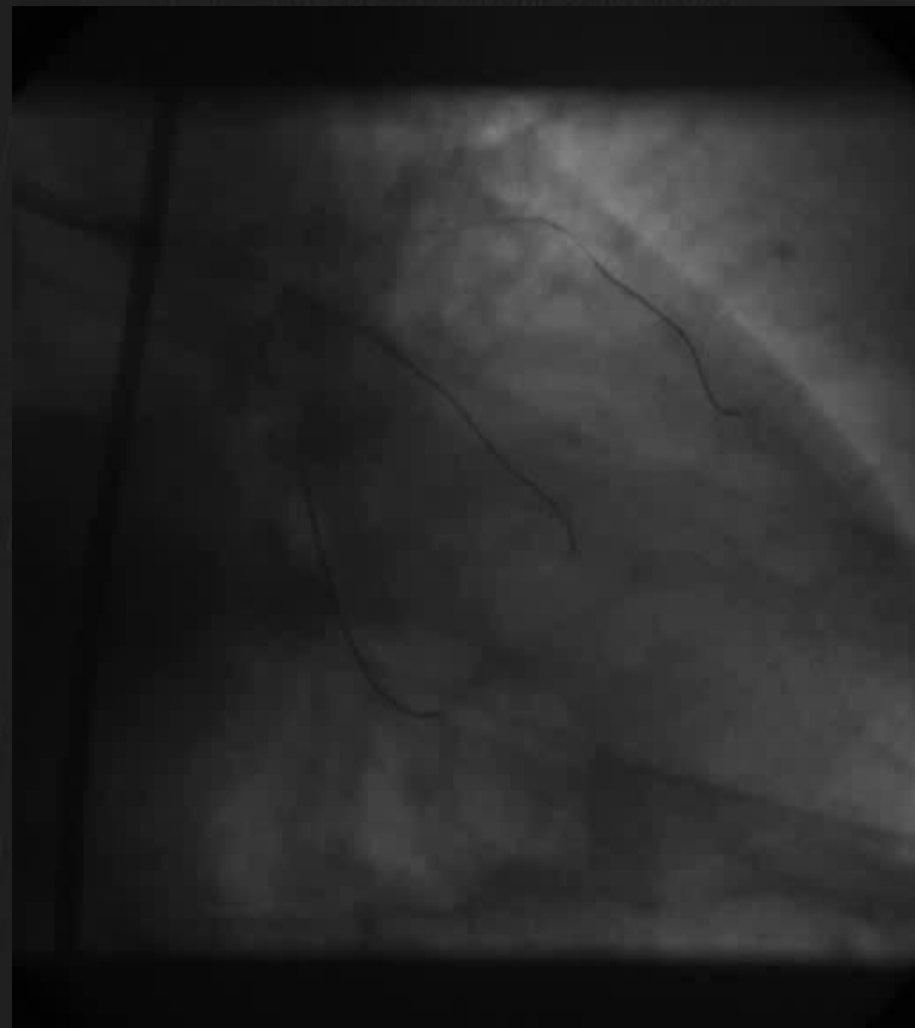
Following Kissing Balloon Inflation

# Left Main Trifurcation



Positioning Intermediate Stent - TAP technique

# Left Main Trifurcation



Following Intermediate Stent and Kissing

# Left Main Trifurcation

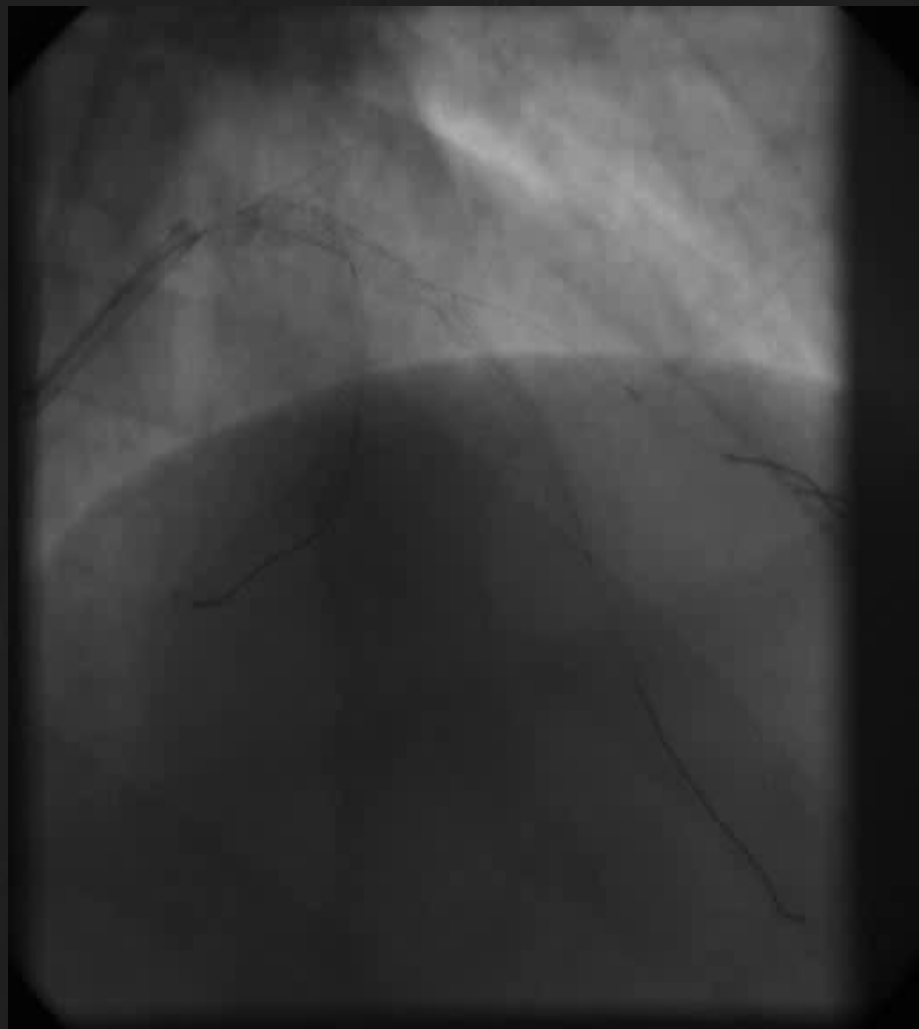


Mid LAD and Diag Dilatation



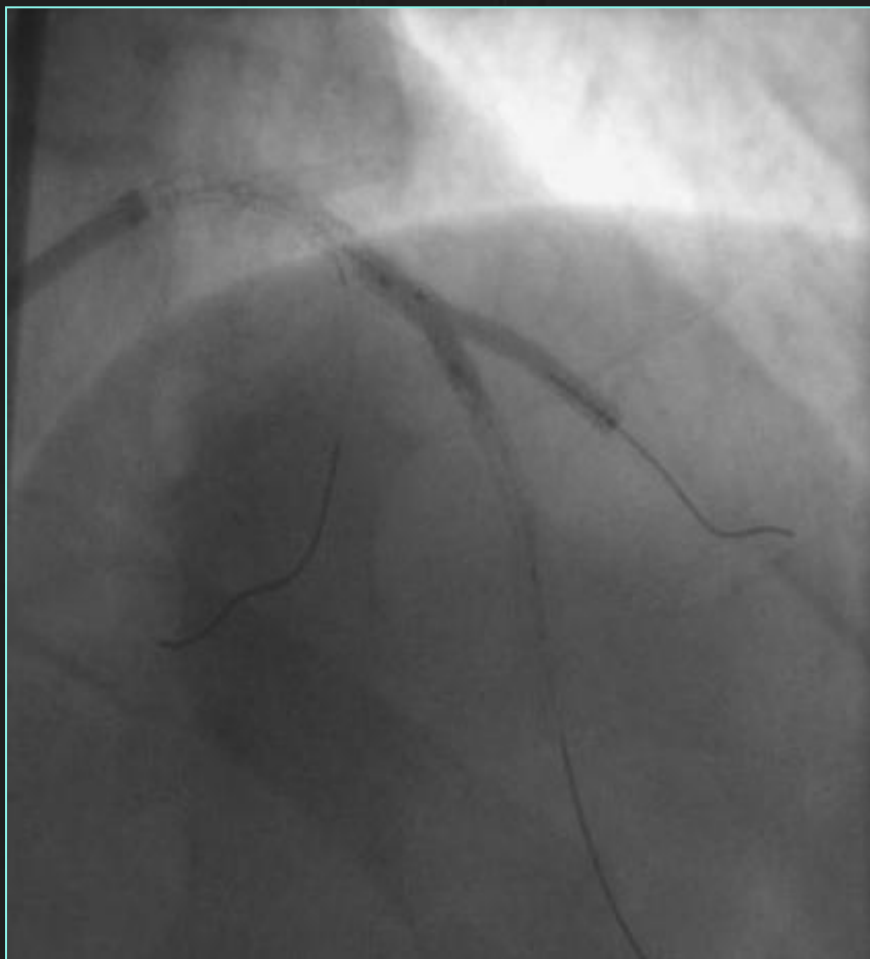
Mid LAD Stenting

# Left Main Trifurcation

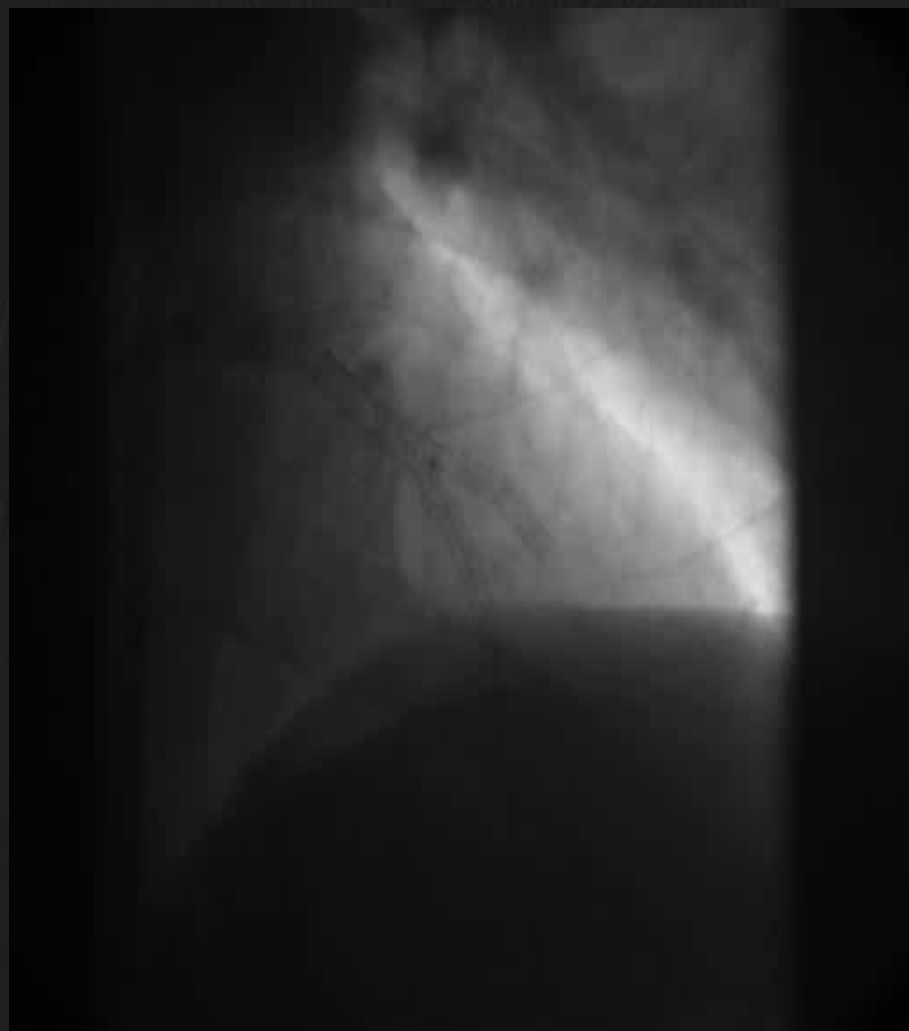


Following Mid LAD Stenting  
Provisional for Diag Branch

# Left Main Trifurcation

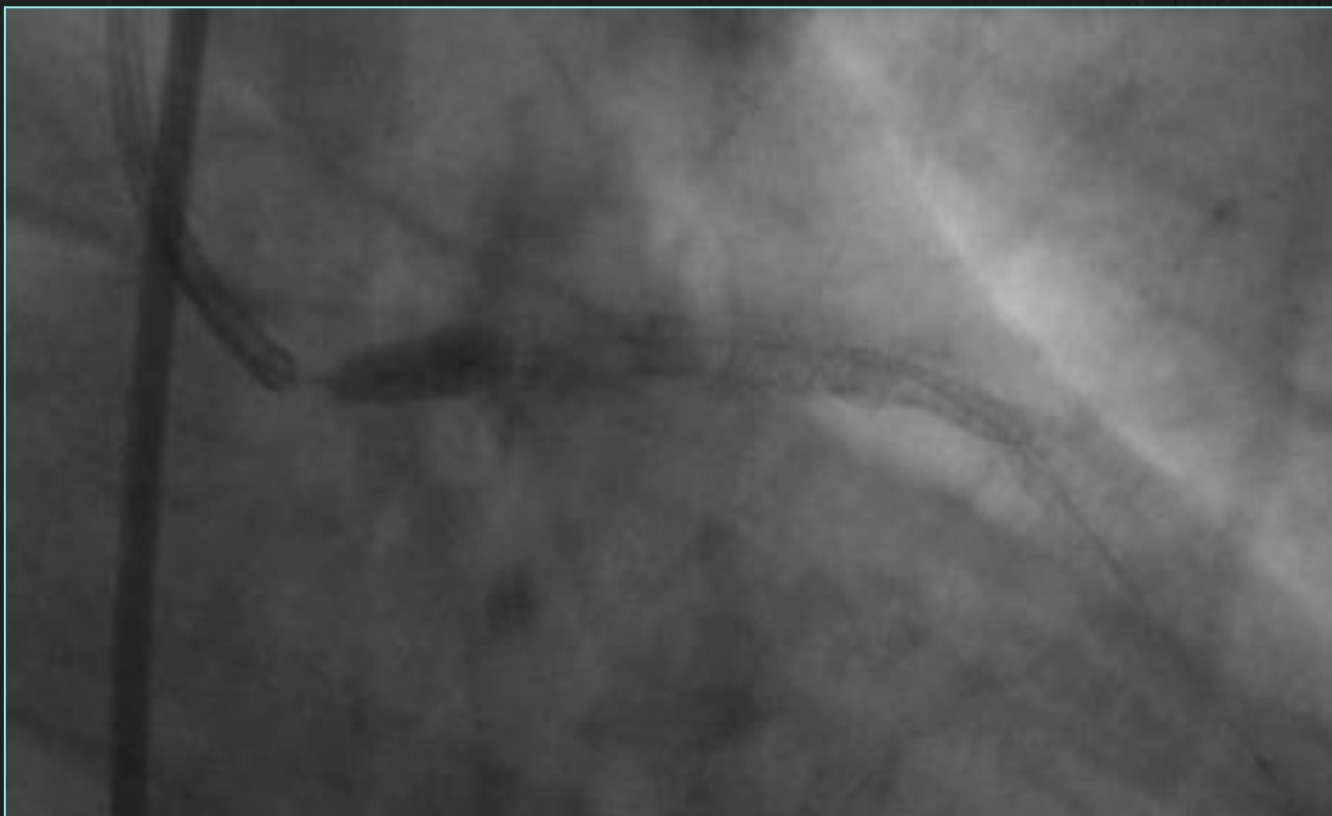


TAP technique  
Diagonal Branch



Following stent  
Diagonal Branch

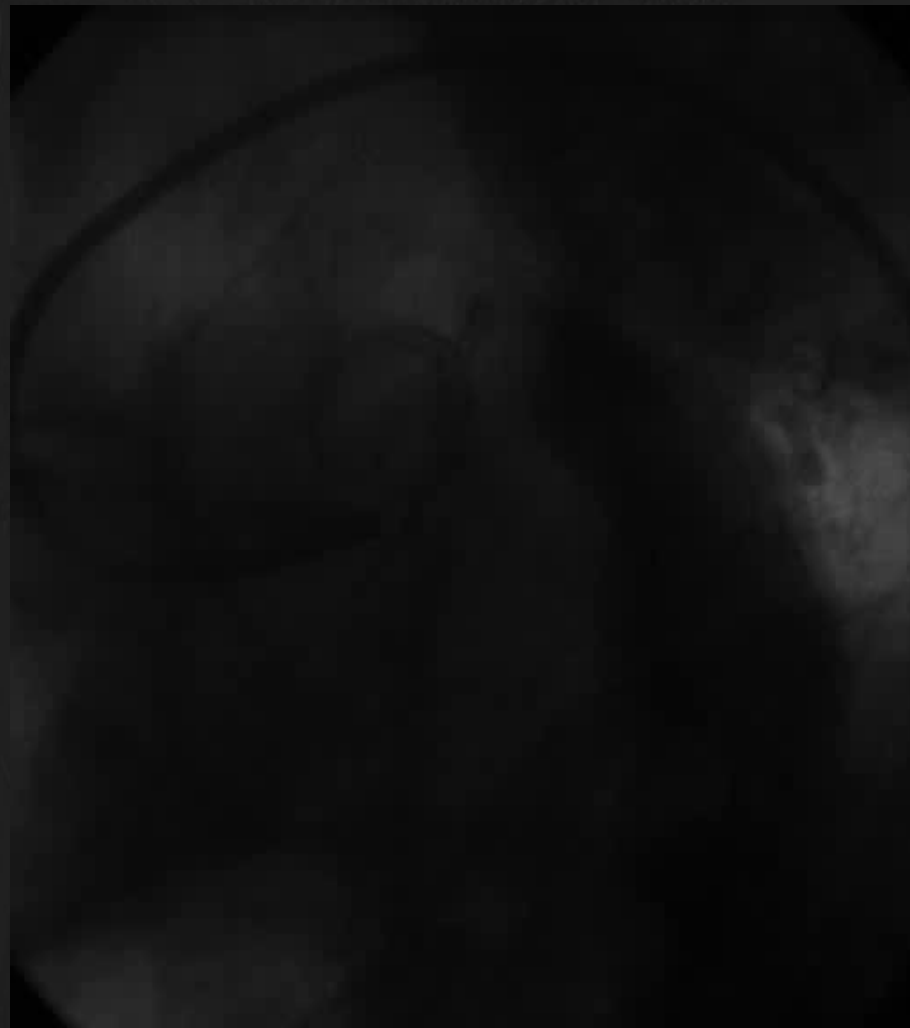
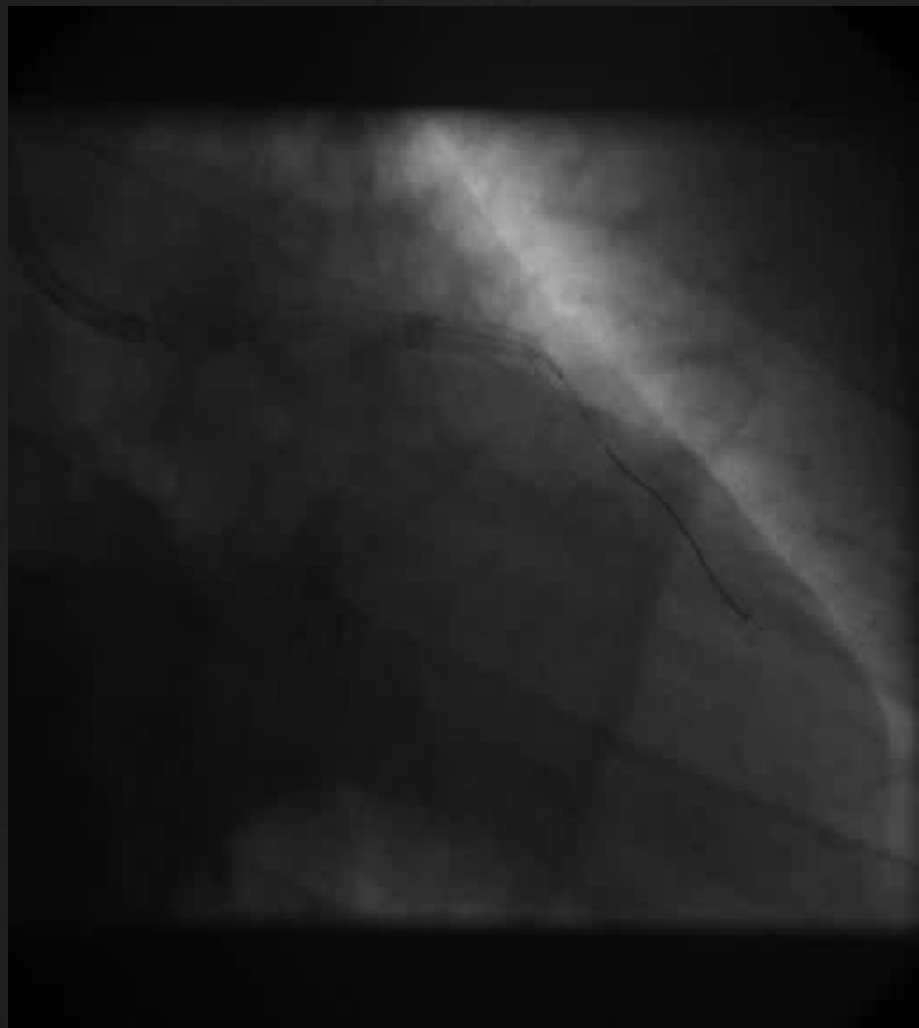
# Left Main Trifurcation



Post dilatation Left Main Body



# Left Main Trifurcation



Final Result

# Left Main Trifurcation

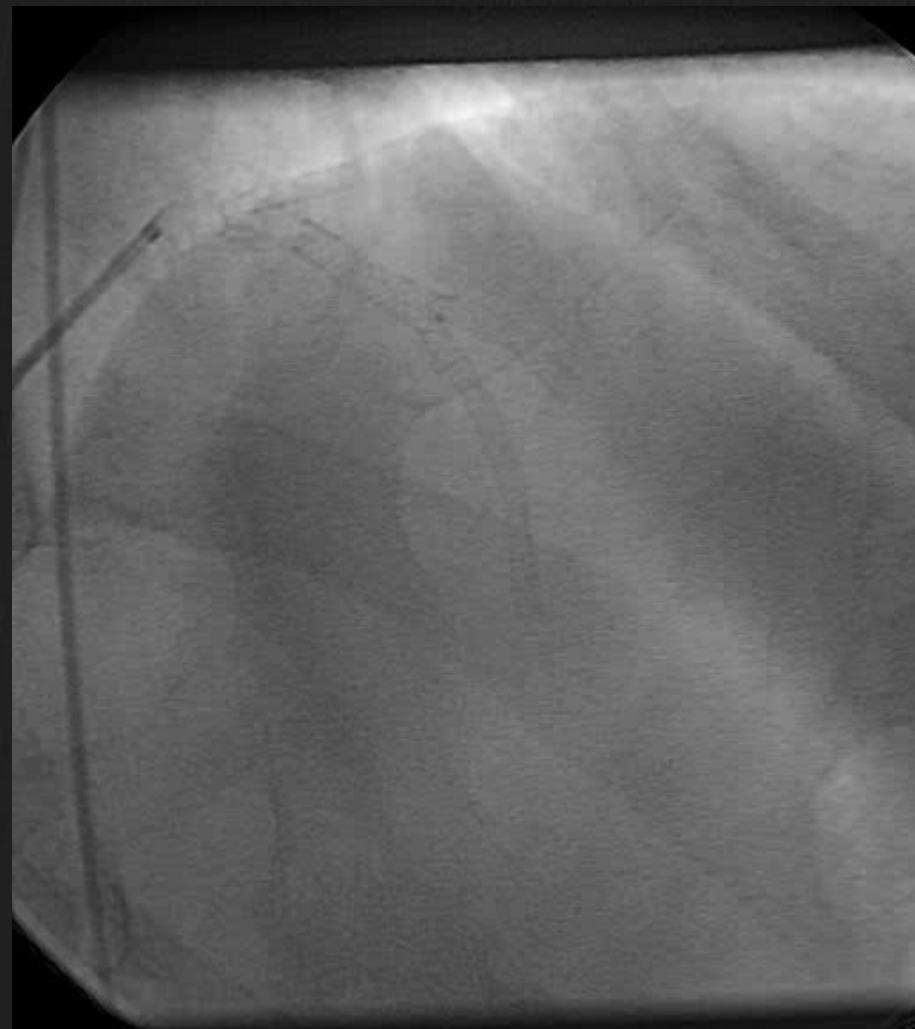
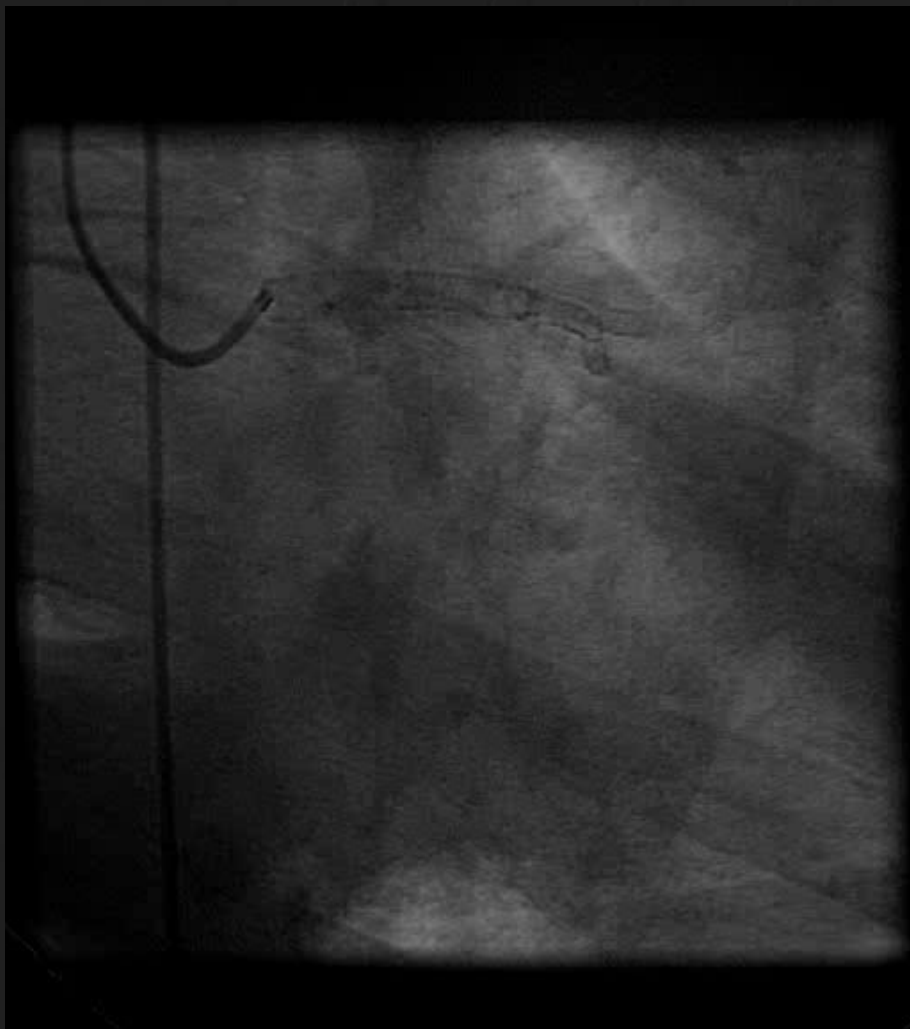


Final Result

# Left Main Trifurcation



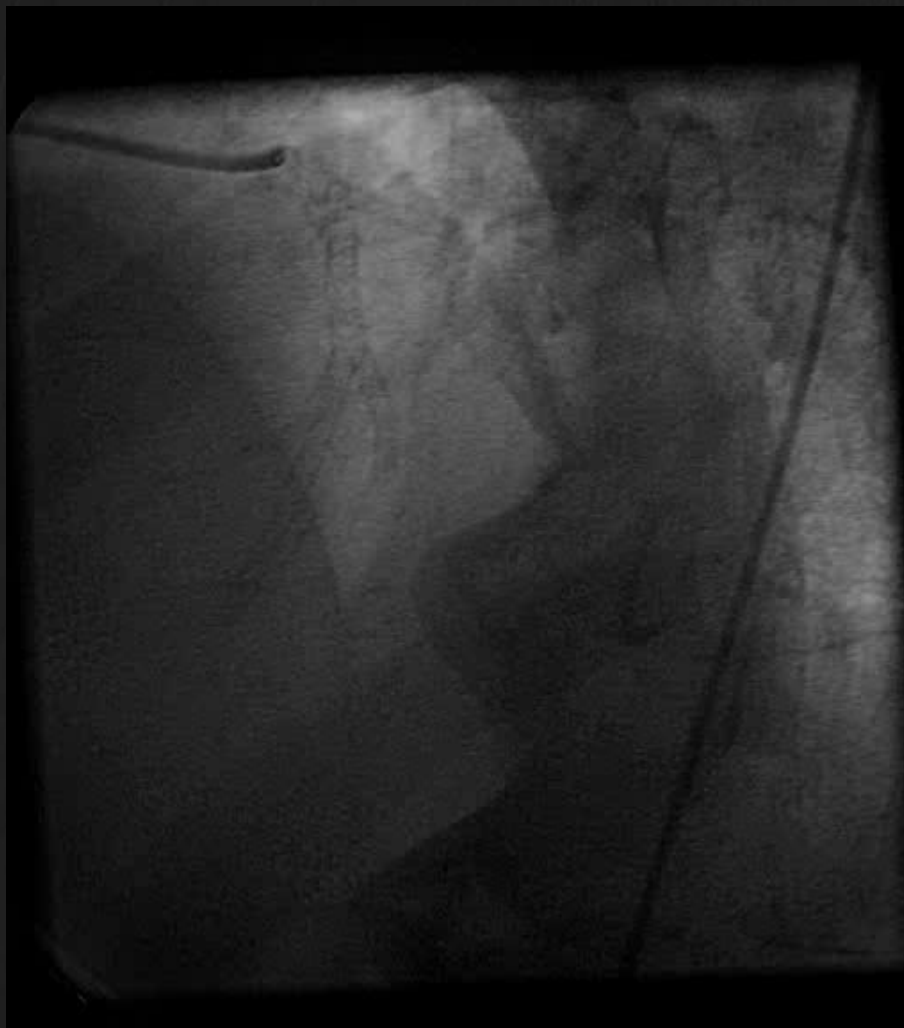
- 6-Months F-UP
- Patient Asymptomatic
  - Negative Maximal Stress Test



# Left Main Trifurcation



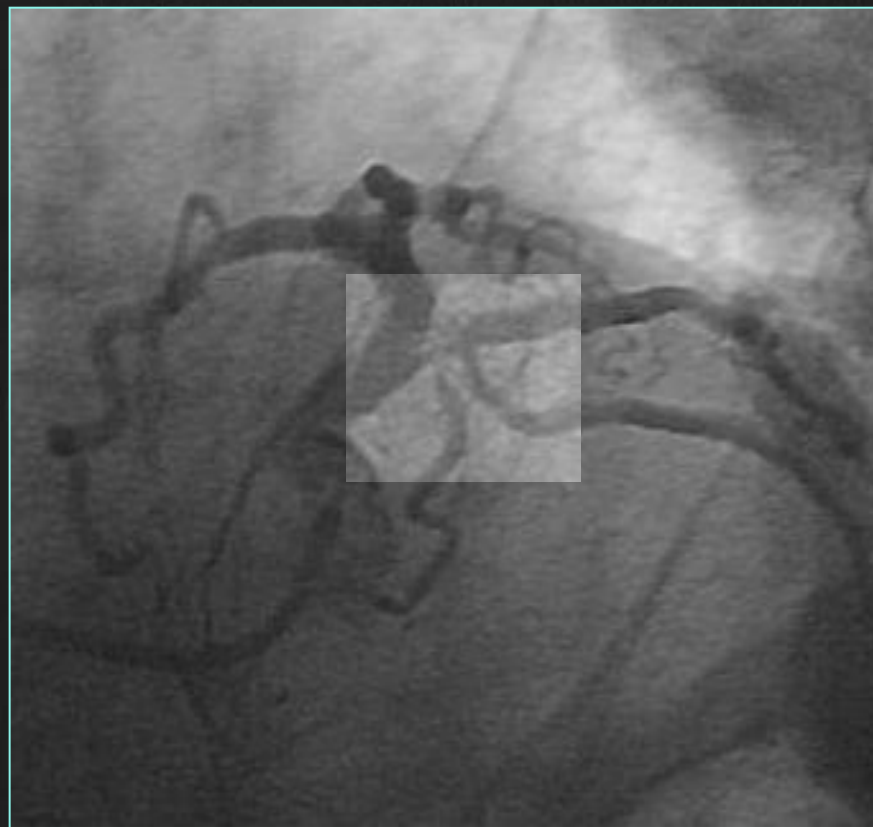
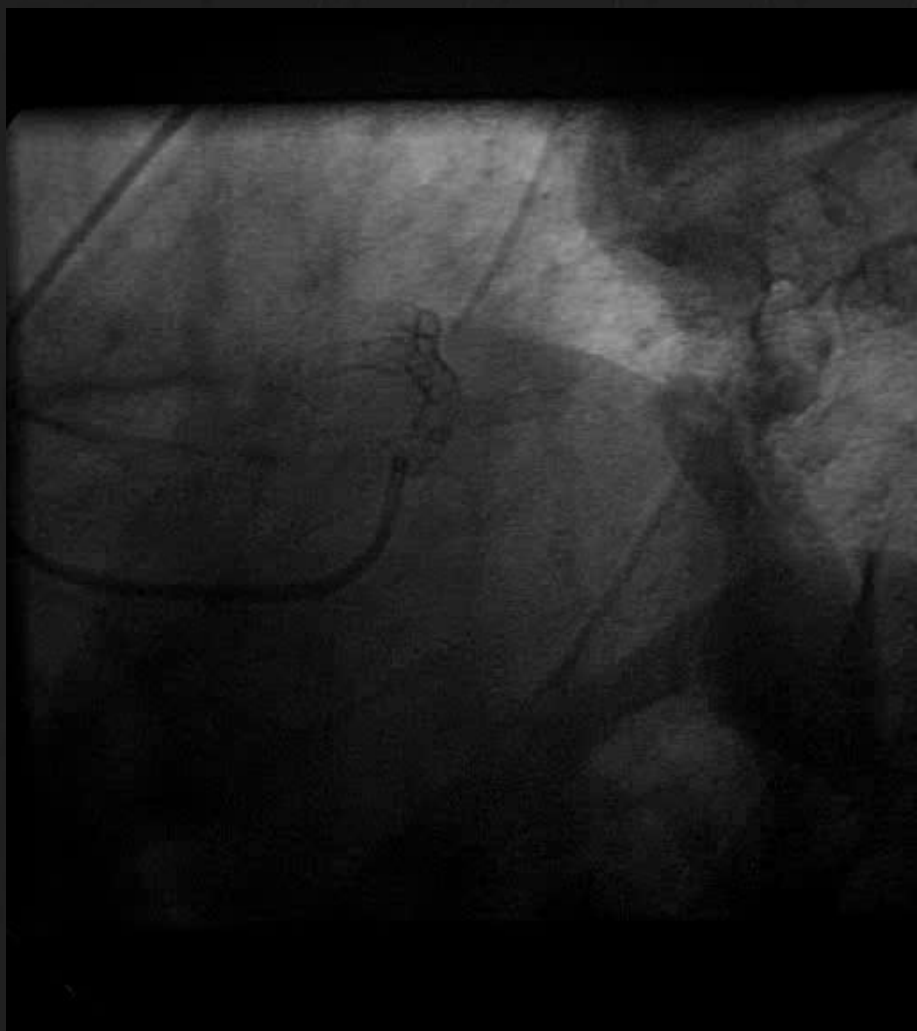
6-Months F-UP • Patient Asymptomatic  
• Negative Maximal Stress Test



# Left Main Trifurcation

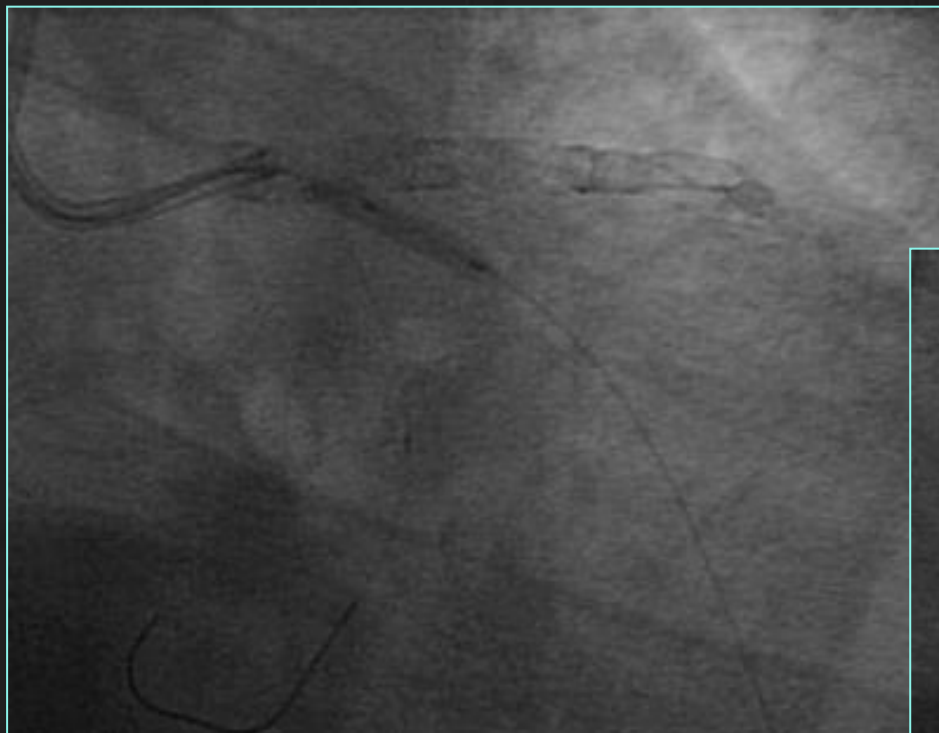


- 6-Months F-UP
- Patient Asymptomatic
  - Negative Maximal Stress Test



# Left Main Trifurcation

6-Months F-UP

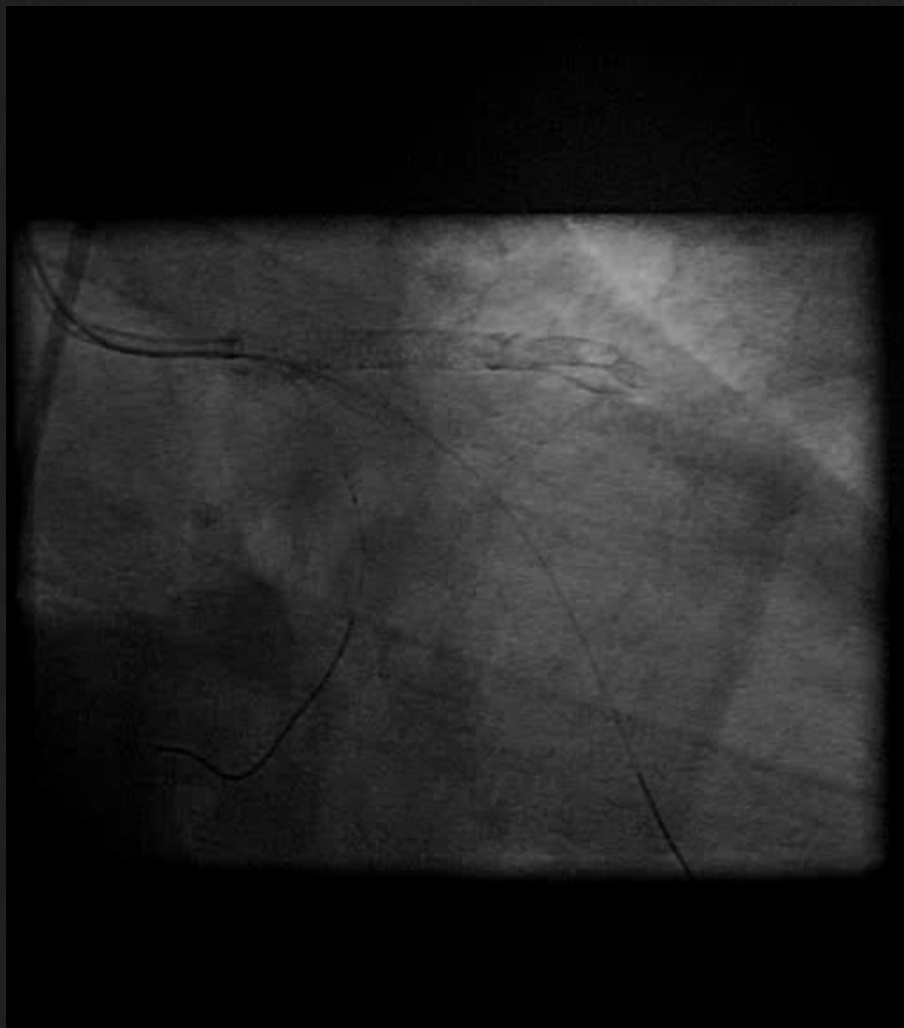


Balloon Dilatation CX-Intermediate

# Left Main Trifurcation

## 6-Months F-UP

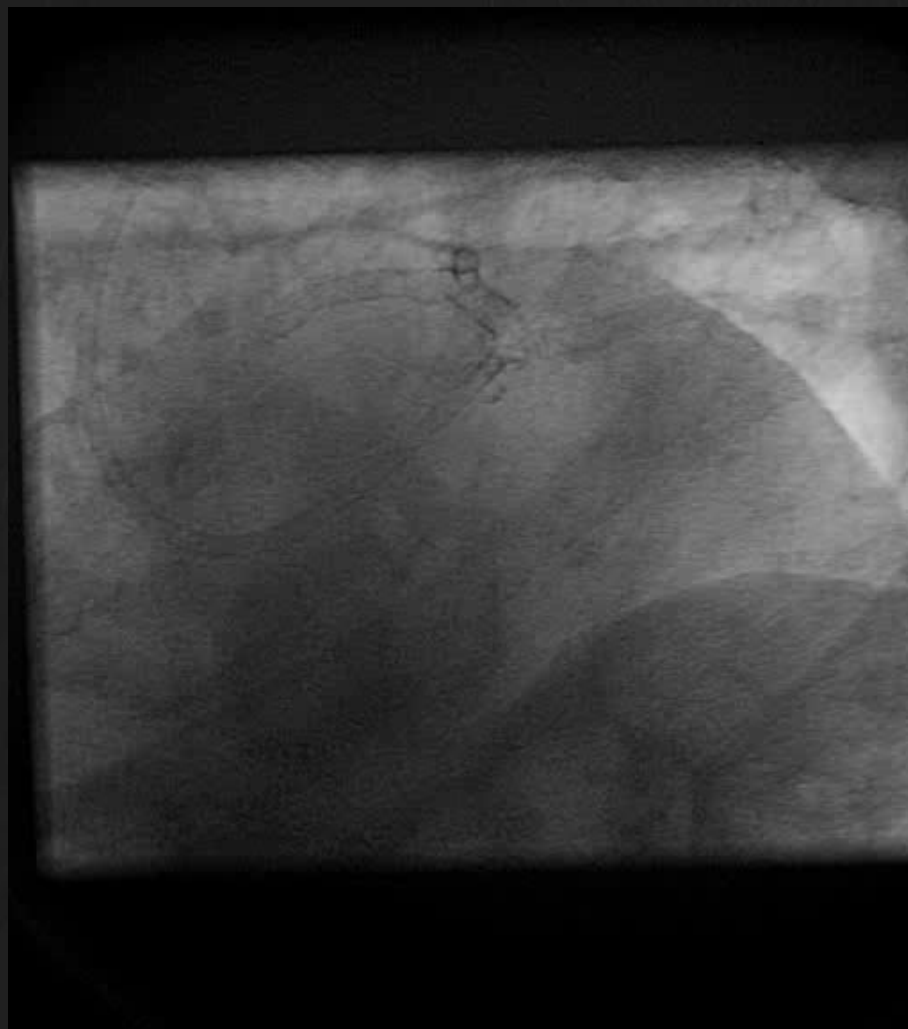
Following  
Dilatation CX-  
Intermediate



# Left Main Trifurcation



6-Months F-UP



Final Result



# Conclusions

The final result is far more important than the technique utilized

*IVUS check on both branches every time 2 stents are implanted*